

2nd International Symposium on Sustainable Development, June 8-9, 2010 Sarajevo

Services for the People with Disabilities in e-Government Applications: The Case of *e-Turkey*

Serhat Özgökçeler

Department of Labor Economics and Industrial Relations, Uludag University, Bursa, Turkey
serhat@uludag.edu.tr | sozgokceler@gmail.com

Görkem Bahtiyar

Department of Economics, Uludag University, Bursa, Turkey
gorkbaht@hotmail.com

Abstract: In its simplest form, the concept of e-Government means the conduction of mutual duties and services between citizens and the state in an uninterrupted and safe manner. In this respect, e-Government enables the provision of public services to the citizens in an electronic/digital environment. This way, the e-Government perspective which tends to replace the bureaucratic and classical state, aims every institution and individual to reach the state via information technology-based systems. In social life, e-Government applications have a great importance in providing equal and indispensable conditions for *sustainable development* for everyone in the society. An efficient e-Government application necessitates development of services like *e-health*, *e-inclusion* and *e-learning*. In this context, e-Government should be considered as a *social inclusion* process toward an “Information Society for Everyone” [ISE], especially concerning some groups which have the risk of exclusion. E-Government services, conducted for one of those important risk groups, “*people with disabilities*”, have an unquestionable place in the integration process of this group to social life. In this paper, we examine the extent of the *Turkish e-Government* services and in particular kinds of services offered to 8,5 million people with disabilities. In general, it is observed that services offered to people with disabilities are concentrated on *health*, *education*, *employment*, *social rights-social services*, *care services* and *accessibility*.

Key Words: E-Government, e-Turkey, people with disabilities, social services, social policy

I. E-Government Applications: Conceptual Framework

With rapid development of computers and the Internet, the concept of e-Government continues to gain ground in both social life applications and academic literature. To analyze this phenomenon, the need of making a working definition of the term e-Government arises.

Definition of e-Government

An open and widely accepted definition of e-Government has yet to be made. Doubtlessly, the dynamic and instantly changing structure of the Internet and information Technologies is effective in this situation (Naralan, 2008, p.4). For example, according to Curtin *et al.* (2003, p.3) e-Government can be defined as using any kinds of information and communication Technologies (ICTs) to enhance information and service flow towards citizens, raise the level of interaction between the state and citizens, and improve government itself. According to Evans, e-Government is the communication between the state and citizens by means of information and communication technologies. Similar to Curtin *et al.* the United Nations Public Administration Network [UNPAN] defines e-Government as the use of Internet in order to provide public services and transmit information to the public (Evans & Yen, 2006, p.3). Many other definitions may be found in the literature about e-Government. But we can define it as a new understanding of government and administration which uses the digital realm and its means in addition to mostly physical, standard ways and means.

Heading Towards e-Government and the Developmental Stages of e-Government

It is possible to see the inclination towards e-Government as a societal preference. Both demands coming from the people and decisions of the Government is effective in the making of this societal preference. Major motives in the inclination towards e-Government can be classified as (Naralan, 2008, p.7):

1. *Productivity in the provision and acquisition of services,*

2. Gradually increasing democratic conscience,
3. The need and demand for transparency.

Especially in connection with the first item the gain from decreasing transaction costs is also important.

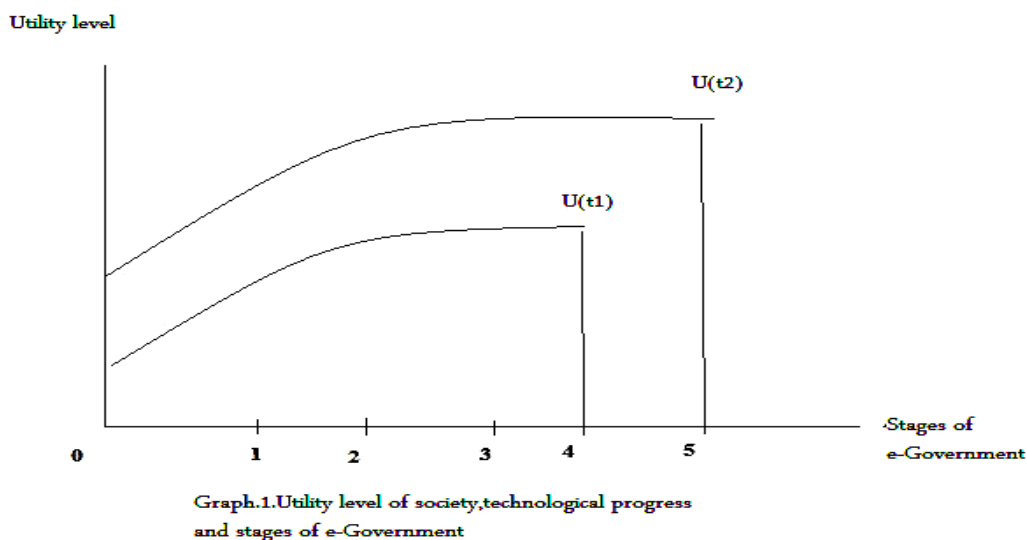
Considering that the Internet was originally a product of military purposed applications, it can be argued that the State uses the developments in ICTs mainly for its own purposes like military advantage, working more efficiently, reaching the information it needs easily and quickly, efficiency in tax collecting etc. But even though this is true, as a result of indispensable interaction between the State and people, citizens also benefit from State's inclination towards e-Government. Those benefits can be saving from time and transaction costs, more participation in the administration process etc.

For e-Government is directly connected with the developments in technology, its development also comes into life gradually. The developmental stages of e-Government can be written as (Basu, 2004, p.113):

- ✓ Online Broadcasting Stage
- ✓ Online Interaction Stage
- ✓ Online Transaction Stage
- ✓ Integration Stage

Online broadcasting refers to a stage in which State is visible in the Internet environment. In the online interaction stage, communication between the State and citizens is only in the beginning. In online transaction stage, it is possible to make transactions via Internet without going to a public office. Finally in the integration stage, various transaction channels [namely websites] by which citizens and the State interact are gathered under one roof, one channel.

Main mission of e-Government is to improve government and administration for everyone. In this respect, the term e-Government overlaps with "good government". So the main mission is to improve the efficiency of government and expand the utility area for everyone. Considering the developmental stages of e-Government, this mission is achieved its highest level in the integration stage and some kind of utility maximization is reached (Basu, 2004, p.109-114). And also, it is possible to derive some implications on this subject, especially about the role of technological progress, the development and future of e-Government. Of course, this maximizing equilibrium should be limited to the current level of technology. So it should be observed that when the technological level improves, transition to another stage in e-Government [a fifth stage] may be possible.



In Graph.1, t_2 refers to a higher technological level than t_1 . According to this, with the t_1 technology, utility of the society is maximized at the fourth stage (integration). But when the t_2 technology is acquired two effects will appear: First, previous utility levels provided by each stage of e-Government rises [as can be seen from the distance between the two curves]. Second, transition to a fifth stage in e-Government becomes possible and utility becomes maximized in the fifth stage.

E-Government: Opportunities and Risks

As in every process of change, transition to e-Government brings along some risks in addition to the opportunities. If customer satisfaction approach is applied a rise in the individual welfare and a decline in individual costs are provided. "Centralization of decisions", especially when it comes to economic decisions provides saving from budgetary expenses. Furthermore there is a link between *e-Governmentization* and the development of participator democracy. However, excessive inclusion of the State in private life using Internet and information Technologies come the risk of violation of individual privacy and censorship (Evans & Yen, 2006, p.212; Kircova, 2003, p.23). For example the tendency of decentralization in government and the centralization of decisions mentioned above seems to be in contradiction with each other. Censorship applications can be avoided through democratic channels. But violation of private information stands as a serious risk.

II. E-Government /Digital Government Applications in Turkey

It is possible to deal with the applications found within the context of e-Government in Turkey within two dimensions of *centralized* and *local governments*.

The e-Government Applications Providing Service within Centralized Administration

It is possible to consider the history of the researches in the fields of science and technology carried out throughout the Republican era. With this fact in mind, the desire of the public sector to make use of information technologies [IT], though not in terms of e-Government, go back to past times. The Population Registry Office that processes masses of information launched a project in 1970s in an attempt to transfer the transactions into the electronic media. The fact that in a time period in which the internet did not exist and the computers could only be had institutionally, it is very meaningful that such a project was considered. However, the project in question was not considered and initiated as an e-Government project; it was intended to be an automation aimed at storing and easily processing data masses. This project that could only be concluded in a long period of 30 years is known as **MERNİS** (Centralized Population Management System). With this system that went on-line in 2003, the discourse of e-Government in Turkey also started. Thanks to the system in question, the institutions get people's identifications confirmed and carry out transactions accordingly based on this information obtained from the system (Naralan, 2008, p.69).

While the operations such as **Say2000i** [Web-Based Accountancy Automation System], **VEDOP** [Tax Offices Automation Project], **GİMOP** [Custom Administration's Modernization Project], **UYAP** [The Nation Judicial Network Project], The Ministry of External Affairs Project, **Pol-Net** [The Police Information Network Project], **EVAS** [Electrical Data Transfer System] directed by the central government were initially set up as only for provision of information, they eventually turned into introductory steps taken for e-Government with the intention of providing services.

The project of *Information Society Strategy* was proposed for the agenda in 2006; some comprehensive changes were subsequently put forward till 2010 that *had the strength of international competition aimed at sustaining information-based economical and social improvement and enhancing the social welfare*.

The EU dimension has become all the more important for Turkey in terms of the perspective of e-Government applications. In this connection, Turkey, strictly bound up with its own efforts to become a full member of EU, has shown close interest in the efforts and projects of EU member states. Accordingly, the Prime Minister's Office commenced the initiation of **e-Turkey** in 2001 within the framework of the action plan of **e-Europe+**. In the following time period, Turkey became a party to e-Europe 2005 with the status of an observer together with Romania and Bulgaria (DPT, 2005).

Various bodies were assembled in an attempt to conduct activities such as improving the surveys related to e-government and their inspection, and their duties and powers were also determined. The fact that the bodies recently set up and the projects prepared are coordinated by the State Planning Organization (SPO) and by the subsidiary departments has made it possible for the information policies to be administered and controlled by only one and the same point. **BTYK** [The Supreme Council for Science and Technology], *Information and Economical Modernization Works*, **TUENA** [The National Information Infrastructure], **ETKK** [Electronic Commerce Coordination Council], *The Department of Information Society*, *The Turkish Information Council*, *The Communication Council's Works of the 9th Transportation Council*, *E-Transformation Turkey*, *Vision 2023 Technology Projection Works* and the *e-Government Door* are just some of the important councils and projects that have been proposed for the agenda regarding e-Government.

The E-Government Applications Providing Service at Local Governmental Level

Recently, IT and computers have increasingly been used as a tool to obtain service from regional and local governments and participate in administration (Musgrave, 2003, p.262). Yildiz (2002, p.236) emphasizes that the use of IT has the potential of constituting an “added value” for the local governments in terms of its functions and operations in question. In addition, it is also stated that the use of these technologies in local governments have taken place both *administratively* and *politically*. It is also emphasized that while the administrative-based targets consist of *preparing a web page*, the political-based targets consist of performing better in terms of *transparency*, *participation* and *accountability* in addition to the use of technology (2002, p.239–241). Most of the local governments in Turkey make use of information technologies usually in terms of “*providing information*”.

The Provisional Special Administrations, one of the local administrative units in our country, do not have their own official web sites; they only have a page on the local Governor’s web site that aims to provide basic information. Similarly, village legal entities that are also regarded as a local administrative unit do not have their own official web sites either (Parlak & Sobaci, 2010, p.227). In terms of the services and activities provided, municipalities make more efforts in terms of providing services over the internet in comparison to other local administrative units. At the same time, while it is easy to predict that the demands of the small residential areas with low population density and small town municipalities in terms of taking advantage of internet facilities are not the same as those more densely populated areas and bigger town, similarly, the variety of the service to be provided will not be the same either.

It is stated that the municipalities with an official web sites in Turkey use their web sites like “brochure” like promotional platform where they promote the mayor and the political party of the mayor rather than intending it as a tool of interaction with the public or providing information and services about public amenities (Yildiz, 2002, p.243). In Bensghir’s studies, the official web sites of the grand municipalities of Ankara (2000a), Istanbul (2000b) and Bursa (2000c) were subjected to content analysis and similar results were obtained.

The M(obile)-Government Applications Providing Services at Central and Local Governments

Mobile-Government applications that are on the increase world-wide have application possibilities in different areas in Turkey. While some of those applications in question provide services at a national level, the others do at regional and local levels.

The Traffic Data System Project that went into effect in 2003 and is the first ever M-Government application in Turkey, relies on the presentation of GPRS infrastructure of an national GSM operator, and provides constant communication between the traffic patrols on inspection duty on motorways and their head offices.

One of the system applications that is designed for the vehicles of General Directorate of Security, uses the GPRS technology of a GSM operator as communication infrastructure and consists of software and mobile hardware units is **MOBESE** [Mobile Electronic System Integration]. This application makes it possible for the security forces to intervene in the incidences in the shortest time possible, provide the best services to the public paying extra attention to the individual rights and liberties, and establish the notion of society-supported police.

One of the services provided in an attempt to offers uninterrupted services to the public is **telephone-in municipal work** which enables the public to inquire about property and environment taxes and pay them as well. In addition, in order to provide flow of information during a possible natural disaster, an early **warning system-emergency response system** is also established. Finally, municipalities are able to send off some local information as text messages to the mobile phone of the local public using the cell broadcasting of the GSM network in the local area.

As Cook (2000, p.4) stated, e-Government applications recommend local governments “a new method” in terms of offering public services to the public and internal operations. Despite the fact that it does not seem easy to realize it, it offers great advantages to those that provide these services and benefit from them. The prominent advantages are summarized as in the following (2000, p.4–5):

- ✓ *Increasing the effectiveness through making the administrative processes more productive;*
- ✓ *Improving the internal communicative networks of the local governments;*
- ✓ *Enabling the provision of more effective and productive services to the public;*
- ✓ *The local governments’ easily keeping up with the demands and expectations of the public through e-Government applications;*

- ✓ *E-Government advantages, especially the websites, are a tool of promotion and public relations of themselves and their activities for the local government units*

Given the e-Government applications in the local governments in Turkey, there seems to be some problems in terms of the access of the public to web sites of these units, setting up a centralized web site enabling coordination and flow of information and its sharing amongst the local governments, the coverage of the web sites and the confidentiality of personal information together with the security of that information (Yildiz, 2002, p. 244–248).

E-Government in the World and in Turkey in Numbers

According to the studies carried out by Taylor Nelson Sofres [TNS] in 2001 and 2002, Turkey was found to be far behind in terms of e-Government applications in comparison to other countries. According to TNS's 2001 study, it was found that only 3% of the population in Turkey made use of the e-Government applications in the past year and Turkey was in the last place out of the total of 27 countries. This proportion rose to 13% in 2002 (TNS, 2002, p.18).

In the *1st Interim Report of e-Turkey Initiation* in 2002, it was found that the household who had internet access was 7%, the proportion of the regular internet users was 3%. The proportions in question in the EU countries were found respectively as 37% and 47% (Basbakanlik Genelgesi, 2002, p.109).

West (2008) determined the e-Government order of the 198 countries for the years of 2007-2008. Based on this, while Turkey was in the 9th place in 2007 [43,5 % index], it dropped back to 61st place in 2008 [34,2% index]. South Korea retained its top position in the 1st place for those two years; for the year 2008, Taiwan was in the 2nd place, USA in the 3rd, Singapore in the 4th and Canada in the 5th. Moreover, Papua New Gina was in the 196th place, Mauritania in the 197th place and Tuvalu was in the last place.

The World Internet Use and Population Statistics unit updated its data in 2009. Table 1. illustrates this in summary:

World Regions	Population (2009 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000- 2009	Users % of Table
Africa	991,002,342	4,514,400	86,217,900	8.7 %	1,809.8 %	4.8 %
Asia	3,808,070,503	114,304,000	764,435,900	20.1 %	568.8 %	42.4 %
Europe	803,850,858	105,096,093	425,773,571	53.0 %	305.1 %	23.6 %
Middle East	202,687,005	3,284,800	58,309,546	28.8 %	1,675.1 %	3.2 %
North America	340,831,831	108,096,800	259,561,000	76.2 %	140.1 %	14.4 %
Latin America/Caribbean	586,662,468	18,068,919	186,922,050	31.9 %	934.5 %	10.4 %
Oceania / Australia	34,700,201	7,620,480	21,110,490	60.8 %	177.0 %	1.2 %
WORLD TOTAL	6,767,805,208	360,985,492	1,802,330,457	26.6 %	399.3 %	100.0 %

Source: <http://www.internetworldstats.com/stats.htm> (09.05.10).

Table 1. World Internet Usage and Population Statistics

Figure 1. illustrates the countries that have the highest number of Internet users out of 27 EU countries:

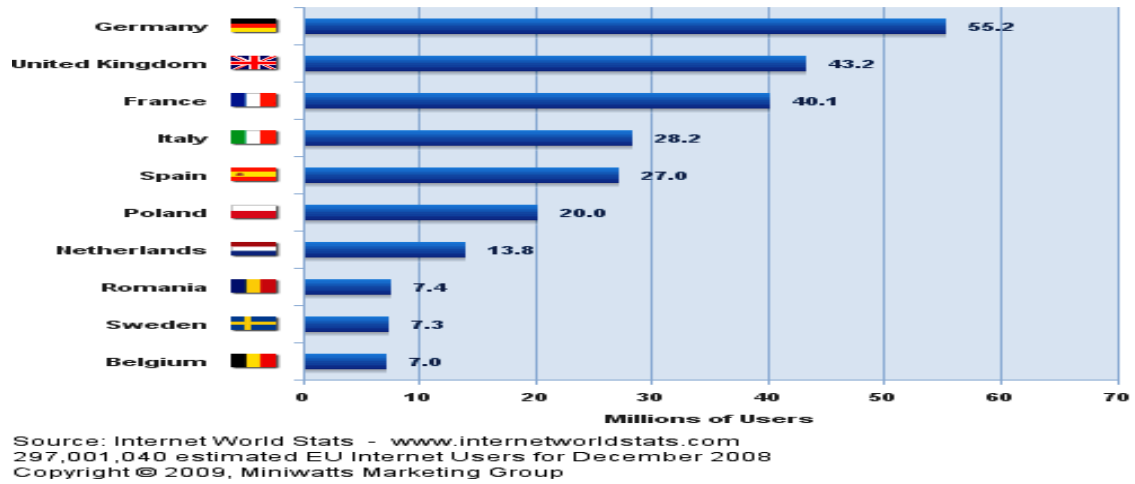


Figure 1. European Union - Top 10 Internet Countries

The total number of Internet users in Turkey where 76 million people live is 34,5% and this constitutes 6.2% of the total Internet users in the European Continent. Table 2. and Figure 2. illustrate this particular case:

<u>EUROPE</u>	Population (2009 Est.)	Internet Users, Latest Data	% Population (Penetration)	User Growth (2000-2009)	% Users Europe
<u>TURKEY</u>	76,805,524	26,500,000	34.5 %	1,225.0 %	6.2 %
<u>TOTAL Europe</u>	803,850,858	425,773,571	53.0 %	305.1 %	100.0 %

Source: <http://www.internetworldstats.com/stats4.htm#europe> (09.05.10).

Table 2. World Internet Usage and Population Statistics

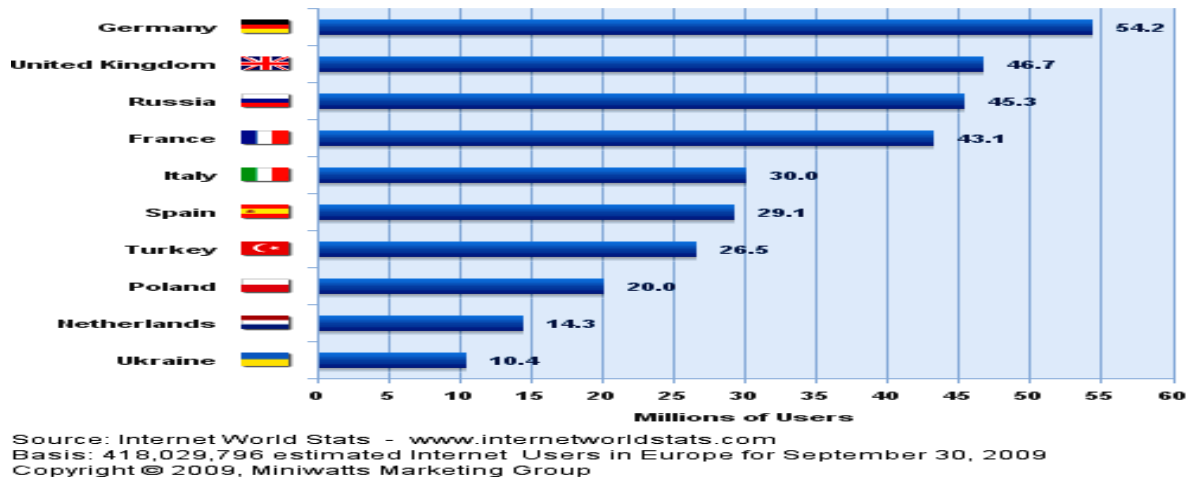


Figure 2. Internet Top 10 Countries in European

According to the illustration above, Turkey is at the 7th place with its 26,6 million users out of the top ten Internet user countries in Europe.

In order to make use of e-Government application in Turkey, each citizen should purchase a pin code just once for 1 Turkish lira. However, the pin number in question was purchased by only **246.638 citizens** as of May, 2010; however, **only 171 different transactions** out of **22 public services** with regards to e-Government were offered in an integrated manner (Zaman [newspaper], 04.05.2010). Given the planning that half of the population of Turkey will be using e-Government related transactions by the year 2013, it seems almost impossible for this prediction to come true.

Disabled People-Oriented E-Government Applications in Turkey

The disabled, who are faced with the increasing problem of exclusion with the developments in IT, are employed at low salary jobs or can not enter into the labor markets because of the reasons such as generally higher proportions of unemployment and being unable to equally benefit from education and other services. IT that *trivializes* the geographical borders and distances, and play an active role in the increase of flexible employment forms may also cause the new types of exclusions to appear in addition to offering some kind of new opportunities for the disabled (Canbey-Ozguler, 2006).

In Turkey where the 12,29% of the country's population, that is, **8 and half million people are disabled**, or in other words, in Turkey where 36,3% of the disabled are illiterate and 68% of these do not have any their disability-oriented special arrangements in their residential areas (Zaman [newspaper], 08.05.2010), it will be possible to facilitate the integration of the disabled into the social life thanks to the use of IT. In this sense, it will be vital to take advantage of the experiences of the developed countries with regards to this matter.

What E-Turkey has to Offer to the Disabled in Turkey

There are many endeavors and projects developed by the centralized and local governments in Turkey aimed for the disabled citizens. Within the context of IT, the endeavors and projects related to computer and Internet use, on the other hand, are regarded as "*adequate for development*" areas together with those yet "*at their infancy*". This area should also be considered in terms of the standards that these IT products such as Internet and telephone should have. For instance, it is vitally important to design web sites that visually impaired people can have access to and produce web sites designs supported with graphic, text and animations for hearing impaired people. In this context, we are faced with a requisite whereby the Internet sites open to whole public should have the qualities in question and produce designs in accordance with the WAI standards determined by W3C. In this sense, the results of the investigations carried out by the experts of the Court of Accounts located that the majority of the official web sites of public institutions did not have the standards mentioned above throughout the process of transition to e-Government (Sayistay, 2006, p.143-147 <http://www.sayistay.gov.tr/rapor/rapor3.asp?id=64> [28.03.2009]).

In the context of central government, the official web site of e-Turkey www.turkiye.gov.tr also known as the Entrance to e-Government Public Information Bank offers to the whole citizens 171 services with the cooperation of 22 public institutions. The services in question, in addition to its function of public information bank, have been provided to make these Internet services possible for the citizens to benefit from them from a single position and with confidentiality. The services of the institutions whose integration to the system has been completed are offered over the www.turkiye.gov.tr internet site, the citizens have access to *their own personal* data through logging into the system through their personal codes, e-signature or m-signature, and carry out their transactions with confidentiality. In addition to these, thanks to single-session system, citizens can surf the public Internet sites without renewed registration and make their payments from a single point through e-payment (<https://www.turkiye.gov.tr/portal/dt?provider=HomePageContainer&channel=bilgilendirme&bilgilendirme.bilgiTipi=entegre>, 09.05.2010).



Thanks to the *e-Turkey* application that offer services and information to the citizens on many areas such as from birth to obligatory military service registration, from education to jobs and careers, from social security to travelling and tourism, from environmental issue to culture and art, it will be ensured that the public services will be delivered to the citizens in an easiest and most efficient way, in a quality, fast, uninterrupted and confidential manner. The concept of e-government replacing the bureaucratic and classical concept of a state aims to help every institution and citizen to reach to the state through the systems using information technologies. In this sense, e-Turkey that has established a separate category for the disabled exerts efforts to accomplish some breakthroughs to help them to better integrate into the social life.

In the "Disabled Citizens" category in the concerned web sites, there is a special section where there are **special services and information** for the citizens with mental and physical disabilities. "Information" about such issues as *healthcare, education, employment, social rights and services, nursing and care services, accessibility, institutions and agencies serving for the disabled* are also available in this category.

✓ **Healthcare:** Under this heading can be found information, regulations and articles on such areas as "*Healthcare Services Before and After Birth*"; "*Efforts on Preventing Disability*"; "*Medical Rehabilitation*"; "*Determining and Measuring Disability*"; "*Special Education*"; "*Vocational Education*"

(<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/Sa%C4%9F/C4%B1k/Do%C4%9Fum+%C3%96ncesi+ve+Sonras%C4%B1+Sa%C4%9F/C4%B1k+Hizmetleri>, 08.05.2010).

✓ **Education:** Under this heading can be found books and articles on such areas as Bu başlık altında, “Special Education”; “Vocational Education”; “Educating Families with Disabled Members” (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/E%C4%9Fitim/%C3%96z%C3%BCrl%C3%BC+Bireye+Sahip+Ailelerin+E%C4%9Fitimi>, 08.05.2010).

✓ **Employment:** Under this heading can be found legal information and the services provided on such areas as “Vocational Rehabilitation”; “Vocational Courses”; “Exam for the Disabled”; “Job Placement” (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/%C4%B0stihdam/%C4%B0%C5%9Fe+Yerle%C5%9Firme>, 08.05.2010).

✓ **Social Rights and Services:** Under this heading can be found detailed information on such areas as “Social Welfare Aid (Allowances for the Disabled and the Poor, and other allowances)”; “Rights for Early Retirement or Retirement Due to Disability”; “Tax Privileges and Concession” (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/Sosyal+Haklar+ve+Hizmetler/Vergi+%C4%B0stisnalar%C4%B1+ve+%C4%B0ndirimleri>, 07.05.2010).

✓ **Nursing and Care Services:** Contact Information on areas such as “Institutional Care”; “Care and Rehabilitation Centers” and “Nursing and Caring at Home Services” is available here. (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/Bak%C4%B1m+Hizmetleri/Evde+Bak%C4%B1m>, 07.05.2010).

✓ **Accessibility:** There is authoritative and guiding information on such areas as “Accessing Information”; “Talking Library”; “Access to E-Book Services”; “Physical Arrangements” (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/Ula%C5%9F/%C4%B1labilirlilik/Bilgiye+Eri%C5%9Fim>, 08.05.2010).

✓ **Institutions And Agencies Serving For The Disabled:** There is information such as the detailed contact addresses of the centers of “Private Institutions” and “Public Institutions” (<https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flar/%C3%96z%C3%BCrl%C3%BC+Vatanda%C5%9F/Flara+Hizmet+Veren+Kurum+ve+Kurulu%C5%9F/Resmi+Kurumlar>, 09.05.2010).

As can clearly be seen above, as far as the services aimed for the disabled from the perspective of e-Turkey are concerned, it is possible to say that what those areas of services in question have in common is that they are “informative” and “instructive”.

Local/Private Application

There also exist some platforms at the local level in Turkey which offer services to the disabled by using IT. Thanks to the **Turkey’s first digital library** set up within Technology Centre for the Visually Impaired of Bosphorus University [GETEM], which is one of those platforms, approximately *two thousand visually impaired people* benefit from this library (<http://www.engellilersitesi.com/haber/680-teknoloji-dijital-kutuphane-hizmeti.html>, 02.09.2008).

Besides, there are also some developments currently related to **navigation systems for the visually impaired people**. Thanks to this system, the visually impaired people, with the help of coordinated information received by a GPS receiver based on navigation system giving directions, will be able to reach their destination without any help. The Ministry of Transportation will soon go out to tender for this system (<http://www.engellilersitesi.com/haber/5809-teknoloji-gorme-engelliler-icin-navigasyon.html>, 19.04.2010).

Results and Evaluation

E-Government and e-Democracy that gives the priority to the participation of citizens, is based on the perception of democratic governance, aims to ensure participation through the efficient and rational use of IT, enhances transparency and productivity, improves the opportunities of the disadvantaged people in an integrated way from the grassroots to the upper limits and at an horizontal coordination by embracing them all and focuses on an approach in which a non-centralized and an sustainable social and economical development model is materialized in a democratic process, has become popular in Turkey too as it is the case all over the world.

The support of the society for the development of e-Government in Turkey is vitally important. For this support in question to materialize, *the digital divide* should be minimized and the IT should be made accessible

for each and every citizen at every level. The belief of the public in e-Government applications are strongly decisive whether the e-Government applications will succeed or not. While such an application is to be demanded by the public, Turkey is not at such a position as yet.

It is also important to mention the ensuing deficiencies found in the national information network and infrastructure. As of today, there have occurred some great discrepancies between the nations and regions with regards to the infrastructure in question. Since e-Government entails an integrated and categorical network construction, the opportunities of accessing the network should be revised and enhanced and the distribution, processing, collection, sharing and delivery of information over this network all over Turkey through the establishment of high capacity broadband technologies should be ensured.

Besides, the fact that IT that the e-Government applications are based on, has high costs and that there occurs, therefore, some inequalities in the society in relation to benefiting from these services, the pricing of e-services and how the costs of e-Government applications will be met are just few of the potential areas of debate.

While the efforts underway in Turkey are vitally important, it is also a commonly accepted reality that the efforts in question are not at a satisfactory level. IT and therefore e-Government-related applications and policies are too weak to aim at some real targets such as the employment of the women, improving the e-skills of the children and youngsters, for the old and *the disabled* to be able to fully benefit from the opportunities of information society, their employment, enabling their re-employment or helping them to set up their own businesses. This particular case is related not only to the creation of employment across the country, but also stems from the fact that applications such as micro financing, risk capital and similar applications are not strong enough.

For the sake of popularizing the applications aimed for the whole population in general and for the disabled in specific all over Turkey and accomplishing them successfully, there is a need for *an authoritative and insistent political will* that aspires to this just like it is the case in all reforms.

It is also necessary to break up the possible bureaucratic resistance that is likely to increase the time-cost of materializing the e-Government applications. The applications in question should not only put forward as an informative behavior code for the citizens; besides, throughout the process of entering into the labor market and in similar fields of social policies, real and active services should be shared in the virtual environment.

Finally, the insufficiencies of technical infrastructures related to IT that constitutes the fundamentals of e-Turkey should be resolved urgently. Such a chance/transformation of mentality and technological developments will enable the expected benefits and acquisitions for the e-Government applications in Turkey to be accomplished.

References

- Basbakanlik Genelgesi. (2002). *E-Turkiye*. Ankara: Personel ve Prensipiler Genel Mudurlugu Yayinlari.
- Basu, S. (2004). E-Government and Developing Countries: An Overview. *International Review of Law, Computers and Technology*, 18(1), March, pp. 109-132.
- Bensghir, T.Y. (2000a). Web'deki Belediyelerimiz: Ankara Buyuksehir Belediyesi. *Cagdas Yerel Yonetimler*. 9 (2), pp. 76-90.
- Bensghir, T.Y. (2000b). Web'deki Belediyelerimiz: Istanbul Buyuksehir Belediyesi. *Cagdas Yerel Yonetimler*. 9 (3), pp. 108-122.
- Bensghir, T.Y. (2000c). Web'deki Belediyelerimiz: Bursa Buyuksehir Belediyesi. *Cagdas Yerel Yonetimler*. 9 (4), pp. 106-118.
- Canbey-Ozguler, V. (2006). *Yeni Bir Sosyal Dislanma Bicimi Olarak Sayisal Ucurum: AB Uyesi Ulkelerde "e icerme" Politikolari*. Eskisehir: Nisan Kitabevi.
- Cook, M. (2000). *What Citizens Want from E-Government*. Albany: Center for Technology in Government, pp.4-23.
- Curtin, G.G., & Sommer, M. H., & Vis-Sommer, V. (2003). The World of e-Government. *Journal of Political Marketing*, 2 (3), pp. 1-16.
- Devlet Planlama Teskilati [DPT]. (2005). *E- Donusum Turkiye Projesi 2003 – 2005 KDEP Uygulama Sonuclari ve 2005 Eylem Plani*. Ankara: Bilgi Toplumu Dairesi.

- Erdal, M. (2004). *Elektronik Devlet: E-Türkiye ve Kurumsal Donusum*. İstanbul: Filiz Kitabevi.
- Evans, D. & Yen, D.C. (2006). E-Government: Evolving Relationship of Citizens and Government, Domestic and International Development. *Government Information Quarterly*, 23, pp. 207-235.
- Kircova, I. (2003). *E-Devlet Uygulamaları ve Ekonomiye Etkileri*. İstanbul: İTO Yayınları, Yayın no: 2003-38.
- Musgrave, S. (2003). The Community Portal Challenge-Is There a Technology Barrier for Local Authorities? *Telematics and Informatics*, Vol. 21, pp.261-272.
- Naralan, A. (2008). *E-Devlet ve Algılanışı Üzerine Bir Araştırma*, Ankara: İmaj Kitabevi.
- Parlak, B. & Sobacı Z. (2010). *Kuram ve Uygulamada Kamu Yönetimi: Ulusal ve Küresel Perspektifler*. Bursa: Alfa Aktuel Yayınları.
- Taylor Nelson Sofres [TNS]. (2002). *Government Online: An International Perspectives-Annual Global Report*, Westgate London: TNS Press, November, pp. 18-34.
- West, M.D. (2008). *Improving Technology Utilization in Electronic Government around the World -2008*. Washington, DC: The Brookings Institution.
- Yıldız, M. (2002). Yerel Yönetimlerde İnternet Uygulamaları ve E- Devlet. In B.Parlak & H.Ozgür (Eds.), *Avrupa Birliği ile Butunleşme Sürecinde Türkiye 'de Yerel Yönetimler* (pp.235-252). İstanbul: Alfa Yayınları

Online Sources

- <http://www.engellilersitesi.com/haber/5809-teknoloji-gorme-engelliler-icin-navigasyon.html>, [19.04.2010].
- <http://www.engellilersitesi.com/haber/680-teknoloji-dijital-kutuphane-hizmeti.html>, [02.09.2008].
- <http://www.internetworldstats.com/stats.htm> [09.05.2010].
- <http://www.internetworldstats.com/stats4.htm#europe> [09.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/Sa%C4%9F/C4%B1k/Do%C4%9Fum+%C3%96ncesi+ve+Sonras%C4%B1+Sa%C4%9F/C4%B1k+Hizmetleri>, [08.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/E%C4%9Fitim/%C3%96z%C3%BCr%C3%BC+Bireye+Sahip+Ailelerin+E%C4%9Fitimi>, [08.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/%C4%B0stihdam/%C4%B0%C5%9Fe+Yerle%C5%9Ftirme>, [08.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/Sosyal+Haklar+ve+Hizmetler/Vergi+%C4%B0stisnalar%C4%B1+ve+%C4%B0ndirimleri>, [07.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/Bak%C4%B1m+Hizmetleri/Evde+Bak%C4%B1m>, [07.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/Ula%C5%9F/C4%B1labilirlik/Bilgiye+Eri%C5%9Fim>, [08.05.2010].
- <https://www.turkiye.gov.tr/portal/dt?channel=icerik&icerik.kat=Vatanda%C5%9F/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flar/%C3%96z%C3%BCr%C3%BC+Vatanda%C5%9F/Flara+Hizmet+Veren+Kurum+ve+Kurulu%C5%9F/Flar/Resmi+Kurumlar>, [09.05.2010].

<https://www.turkiye.gov.tr/portal/dt?provider=HomePageContainer&channel=bilgilendirme&bilgilendirme.bilgiTipi=entegre>, [09.05.2010].

Sayistay. (2006). <http://www.sayistay.gov.tr/rapor/rapor3.asp?id=64> [28.03.2009], p.143–147.

Zaman Newspaper, www.zaman.com.tr. [04.05.2010].